

## MISCELLANEA TAXONOMICA. I.

### GRAMINEAE

**SPOROBOLUS hians** G. B. Van Schaack spec. nov. Gramen perenne usque ad 50 cm. altum. Culmi laxe fasciculati erecti 5-6-nodes, internodiis inferioribus brevissimis summo elongato et demum exserto. Foliorum inferiorum vaginæ breves imbricatae valde striatae margine antrorse ciliato et ad apicem lateraliter barbatae caeterumque glabrae, summa glabra margine sparse pilosulo excepto; ligula ad seriem ciliorum usque ad .5 mm. longorum redacta; laminae inferiores planae 2-3 mm. latae usque ad 7 cm. longae in apicem tenuiter acutum gradatim attenuatae subtus laeves supra et margine scabridulae, superiores non visi. Panicula anguste pyramidalis usque ad 20 cm. longa et 10 cm. lata; rhachis gracilis inferne laevis superne antrorse minuteque scabra; rami praecipui capillares paullo flexuosi laeves vel minute scabri plerumque solitarii horizontaliter patentes, secundarii capillares patentes laxe spiculati; pedicelli laeves 1-3 mm. longi, terminali 3-5 mm. longo. Spiculae lanceolatae acutae 1.6-1.8 mm. longae in antheso hiantes purpureo-suffulta. Gluma inferior lanceolata .8 mm. longa obtusa erosa enervis hyalina, superior anguste ovata .9-1.0 mm. longa truncata erosa hyalina enervisque vel 1-nervis. Lemma lanceolatum vel ovatum 1.5-1.7 mm. longum acutum 1-nerve. Palea lemmati aequilonga acuta marginibus hyalinis. Antherae 1 mm. longae. Caryopsis non visus.—BRAZIL: MINAS GERAIS: S. Terezinha, Municipio Ituiutaba, Dec. 20, 1949, A. Macedo 2045. "Grass from 'Resfriado'." (Herb. Missouri Bot. Gard., HOLOTYPE).

*Sporobolus hians* resembles *S. pseudairoides* Parodi but differs from it in having shorter leaves, spreading panicle branches, a palea equalling the lemma in length and anthers 1 mm. long, the latter species having anthers only .25 mm. long.

### LILIACEAE

**HERRERIA latifolia** Woodson, spec. nov. Frutex volubilis ramulis glabris glaucis sparse irregulariterque aculeolatis, internodiis ca. 15-18 cm. longis 2-3 mm. diametralis nodis incrassatis. Folia in rosulis oppositis sessilibus 6-7 sessilia obovato-elliptica apice breviter acuminata basim ca. tertia parte superiore versus gradatim angustata inter se plus minusve inaequalia 9-15 cm. longa 3-5 cm. lata membranacea utrinque glabra crebre multinervia. Inflorescentia per quamque rosulam unica paniculata vel pauciramosa 15-30 cm. longa, multiflora pedunculo glauco minute denseque hirtello vel basi glabrato; floribus luteolis, pedicellis ca. 2-3 mm. longis minute hirtellis, bracteis subtendentibus ovato-aculeatis subaequantibus, tepalis oblongo-ellipticis 3.5 mm. longis 2 mm. latis subaequalibus apice late acutis ibique minute papillatis caeterumque glabris basi in tubo campanuliformi ca. 1 mm. longo coalitis, filamentis staminum aciculiformibus 1.5 mm. longis glabris, antheris compresse ellipsoideis basi usque ad medium fisis 1.5 mm. longis, pistillo ampuliformi 3.5 mm. longo glabro.—BRAZIL: MINAS GERAIS: voluvel dos terrenos de pedra, S. Terezinha, Municipio Ituiutaba, Nov. 26, 1949, A. Macedo 1317 (Herb. Missouri Bot. Gard., HOLOTYPE).

This certainly is the most handsome species of *Herreria* known at the present time. It is apparently most closely related to *H. Glaziovii* H. Lec. (*Glaziou* 14,354 in hbb. Copenhagen and Missouri Bot. Gard.), which, however, has verticillate leaf-rosettes and clustered inflorescences with shorter, more branched, and glabrous peduncles.

#### VELLOZIACEAE

**VELLOZIA Macedonis** Woodson, spec. nov. Suffrutex subcaespitosus. Caudex subnnullus simplex vel dichotome divisus foliorum emortuorum reliquiis tectus. Folia subradicalia lineari-aciculiformia 5–10 cm. longa medio ca. 2 mm. lata apicem obtusem gradatim attenuata basim versus gradatim ampliata vagina hyalina ca. 6 mm. longa 3 mm. lata fulvescentia margine proximate setoso-aculeolata caeterumque glabra multinervosa. Flores solitarii terminali longe pedunculati; pedunculo 6–8 cm. longo 3-gono 6-costato glabro; germe conico-campanulato indistincte 3-gono ca. 7 mm. longo, ostio ca. 5 mm. lato stramineo glabro laevi vernicoso margine obscure lobato; tepalis violaceis 6 oblongo-ellipticis acutis ca. 1 cm. longis 4–5 mm. latis; staminibus 18 in fasciculis 6 triplice convenitis, fasciculis tubo perianthii adnatis obtriangularibus tenuibus glabris exappendiculatis, filamentis et antheris subaequilongis sed medio in fasciculo paulo altius inserto cunctis ca. 5 mm. longis; stylo ca. 1 cm. longo, stigmate depresso-globoso ca. 1.5 mm. lato.—BRAZIL: MINAS GERAIS: mountains, alt. 1200 m., Ouro Preto, Jan. 7, 1950, A. Macedo 2072 (Herb. Missouri Bot. Gard., HOLOTYPE).

The habit of this species is reminiscent of *V. caruncularis*, although, of course, the latter has a densely tuberculate hypanthium. Our species appears to be most related to *V. graminea* Pohl, which, however, has strongly unequal stamens and elaborately appendaged phalanges.

#### LEGUMINOSAE

**PITHECOLOBIUM steyermarkii** Schery, spec. nov. Sect. CAULANTHON. Arbor ramulis juventate brunneo-tomentulosis, prominente lenticellatis. Folia magna, pinniis 2-jugatis; petiolis brunneo-tomentulosis teretibus ca. 4 cm. longis, rhachibus aequalibus glande crateriforme sessile inter insertionem pinnarum inferiorum, rhachibus secondariis eglandulosis; foliolis oppositis 3–5-jugatis et una solitaria addita base extus, ovato-lanceolatis 4–8 cm. longis 15–30 mm. latis apice acuminate basi late acutis, subtus leviter brunneo-tomentosis nervis prominentibus, supra glabris fuscoribus reticulatis; stipulis lanceolatis ca. 4 mm. longis. Inflorescentiae subfasciculatae cauliflorae brevi-spicate; floribus albis fragrantissimis sessilibus congestis subcapitatis, pedunculis 5–8 cm. longis brunneo-pubescentibus, bracteis ovatis parvis 1 mm. longis; calycibus cupuliformibus ca. 2 mm. longis brunneo-tomentosis brevi-dentatis, corollis tubulari-infundibuliformibus 8–9 mm. longis brunneo-tomentulosis brevi 5-dentatis, staminibus multis ca. 18 mm. longis tubo brevi exerto, ovariis lineari-oblongis, glabris, multiovulatis; fructu ignoto.—ECUADOR: Prov. Santiago-Zamora, along Quebrada Honda, vicinity of Rancho Achupallas, alt. 2500–2700 m., J. A. Steyermark (Herb. Missouri Bot. Gard. TYPE).



*Pithecolobium steyermarkii*

A tree with twigs, rachises and inflorescence brown-tomentulose; the leaves large, bipinnate, the pinnae 2 pairs and the leaflets 3-5 pairs plus a single basal leaflet to the outside on each pinna; the ovate-lanceolate leaflets opposite, short-petiolulate, relatively large (4-8 cm. long), pubescent (especially on veins) and light brown below, glabrous, darker and somewhat lustrous above; with 4 or 5 very prominent strongly arcuate lateral veins more or less confluent apexward a mm. or so from the margins, numerous smaller secondary and tertiary veins reticulate, the petiole bearing a single crateriform gland between insertion of the lower pinna pair, but it, the rachis and secondary axes otherwise eglandular. The congested or subfasciculate inflorescences are borne on short spurs from the woody trunk; they are long-pedunculate, the floriferous portion very short-spicate (ca. 5 mm.) and thus appearing subcapitate. The congested, sessile, white flowers are described as very fragrant; the pubescent corolla is 4 to 5 times the length of the cupulate calyx, its teeth lanceolate, 1-2 mm. long, the tube about 7 mm. long; the ovary is turgid, symmetrical, glabrous.

The outstanding features of *P. steyermarkii* are the 2-jugate pinnae with relatively few and large leaflets, and the cauliflorous pedunculate inflorescences. A related species is apparently *P. ramiflorum* Benth., of Brazil, which, however, is said to have sessile spikes and larger leaflets.

**ALBIZZIA paucipinnata** Schery, spec. nov. Arbor 15 m. ramulis glabris longitudinaliter rugosis inconspicue lenticellatis. Folia magna bipinnata, pinnis 3-5-jugatis suboppositis; petiolis 3-5 cm. longis glabris supra subsulcatis glande parva conica vel subcrateriforme versus basem, rhachibus ca. 6-7 cm. supra sulcatis puberulis, axibus pinnarum ca. 6-8 cm. eglandularibus supra sulcatis puberulis; foliolis 7-12-jugatis oppositis inaequilateraliter oblongis 1-2 cm. longis 5-9 mm. latis, sessilibus, basi oblique rotundato-truncatis apice rotundatis et minute apiculatis, subtus puberulis supra glabris nitidis, costa aliquantum excentrica venis secondariis 3-4 paribus ascendentibus; stipulis nullis. Inflorescentiae terminales et subterminales axillares foliis aequilongae (ad 15 cm.) nodosae racemosae capitulis fasciculatis pedunculatis, pedunculis 1-pauci-aggregatis ca. 1 cm. longis tomentulosis, capitulis ca. 1 cm. diametro, bracteis lanceolato-cucullatis parvis pubescens; floribus albis odoratis multis congestis sessilibus, calycibus infundibuliformibus paene 2 mm. longis breviter et late 5-lobatis leviter puberulis, corollis infundibuliformibus ca. 3-4 mm. longis apice puberulis lobis ovate-lanceolatis prominentibus, staminibus multis (ca. 18) ca. 7 mm. longis tubo inclusi, ovariis oblongis glabris turgidis multi-ovulatis; fructibus ignotis.—**ECUADOR:** Prov. El Oro, along Rio Amarillo upstream from Portovelo, alt. 640-760 m., J. A. Steyermark 54035 (Herb. Missouri Bot. Gard. TYPE).

A large tree, the leaves bipinnate with few (3-5) pairs of subopposite pinnae, the pinnae with about 9 pairs of modest, sessile leaflets; the glabrous petiole moderately elongate and bearing a sessile gland basally, slightly exceeded by the eglandular rachis which is puberulent along the top side; leaflets inequilaterally oblong with a tendency toward being subfalcate, but rounded and minutely mucronulate apically, subtruncate basally, glabrous and lustrous above, puberulent below, the costa excentric but not marginal, the few lateral veins markedly ascending. The inflorescences arise from the upper axils as elongate nodose racemes of pedunculate heads that occur fasciculate from the rachial nodes; the peduncles are little more than 1 cm. long the heads (when dry) about 1 cm. in diameter. Flowers are small, funnelform, the corolla lobed for about 1/3 its length and about twice as long as the calyx; the staminal tube is included but about equalling the corolla.

The species is related to *Pithecolobium (Samanea) coripatense* Rusby [ALBIZZIA **coripatense** (Rusby) Schery n. comb.], from which it differs in being more glabrous, with somewhat longer flowers and inflorescences, and without glands on the pinnular rachis; and to *P. (Samanea) multiflorum* (HBK.) Benth., from which it differs in not having the leaflets falcate, glabrous, acute.

**Cyathostegia** (Benth.) Schery, gen. nov.

*Swartzia*, Sect. CYATHOSTEGIA Benth. in Benth. & Hook. Gen. Pl. 1:561. 1865.

Frutices *Swartziae* similes, calycibus cyathiformibus numquam irregulariter ruptis, leguminibus planis submembranaceis, bracteis persistentibus vel subpersistentibus, ovariis 1-2-ovulatis.

In working over Steyermark's Ecuadorean Leguminosae, Nos. 54839 and 54840, cursorily indicated by Dr. Steyermark as *Ateleia* (PAPILIONOIDEAE, SOPHOREAE), proved to belong to the section CYATHOSTEGIA of the genus *Swartzia* (CAESALPINOIDEAE, SWARTZIEAE). As nearly as can be told "ex char." they fall within the concept of *S. weberbaueri* Harms (in Fedde Rep. Sp. Nov. 18:235. 1922.). A check through the herbarium and literature on *Swartzia* made it apparent that both *S. matthewsii* Benth. (in Hook. Icon. III, 1:51, pl. 1064. 1870) and *S. weberbaueri*, apparently the only species of the section CYATHOSTEGIA, are quite untypical of *Swartzia*, and their inclusion there both inconvenient and misleading. It is therefore proposed to elevate the section CYATHOSTEGIA to generic rank, to become the genus *Cyathostegia* (CAESALPINOIDEAE, SWARTZIEAE) transitional from the CAESALPINOIDEAE to the SOPHOREAE of the PAPILIONOIDEAE. As such the genus is confined, as far as is known, to the Andean area of Brazil, Ecuador, Peru and probably Bolivia.

This genus is characterized, as is usually *Swartzia*, by unipetiolate flowers; many (about 30) stamens free or barely united at the base, the inner ones somewhat more slender and shorter, with large linear-oblong anthers; stiped ovary and (dehiscent) fruit; and slender style with small terminal stigma. However, the calyx is distinctly cyathiform or cupulate, subtruncate apically, not rupturing irregularly; the legume is flat and thin, never fleshy or turgid, one-seeded, exarillate, the valves thin and submembranous; the ovary is 1 to 2-ovulate, in contrast to the usually pluri-ovulate ovary characteristic of *Swartzia*; the bracts and bractlets are relatively persistent in contrast to the "very caducous" characterization of *Swartzia*; the stipe of the ovary is briefly adnate to the cupulate calyx below insertion of the petal and stamens; and the leaflets are more numerous than is often the case in *Swartzia*.

The species thus become ***Cyathostegia matthewsii*** (Benth.) Schery, n. comb. and ***C. weberbaueri*** (Harms) Schery, n. comb. The latter can be distinguished from the former by the longer, more lax inflorescence, the larger flowers and the smaller leaves. In Steyermark 54839 the 1-3 lower flowers of the raceme that are in anthesis are strikingly larger than the several buds higher on the rachis. Both the large flowers and the small buds seem to be perfect and complete (although the style is not very evident in the buds), but the superficial appearance is that of a few perfect flowers below with staminate flowers above.

**CASSIA vargasii** Schery, spec. nov. Arbor?, ramulis flavo-tomentosis longitudinaliter substriatis, internodiis ca. 6 cm. longis. Folia magna 10-12-foliolata, stipulis ovato-lanceolatis ca. 7 mm. longis; petiolis ca. 2 cm. longis tomentosis

eglandularibus, rhachibus ca. 10 cm. longis flavo-tomentosis glande conico interpetiolarisi inter jugem inferiorem foliorum et frequenter inter alia juga; foliolis ovatis vel ellipticis, 2.5 (inferioribus)-8 (superioribus) cm. longis, 2-3 cm. latis apice late acutis base obtusis supra leviter pubescentibus subtus flavo-tomentosis, venis lateralibus ca. 8-10 paribus. Inflorescentia racemosa axillaris ca. 10 cm. longa; pedunculis ca. 7 cm. longis tomentosis; bracteis ovato-lanceolatis ca. 8 mm. longis subpersistentibus flavo-tomentosis; floribus aggregatis, pedicellis inferioribus ca. 3 cm. longis; sepaliis inaequalibus ovatis vel orbiculari-oblongis 7-14 mm. longis longitudinaliter venosis glabris vel subglabris; petalis orbicularibus fere aequimagnis ca. 2 cm. longis conspicue venosis flavis glabris; staminibus 7, staminodiis 3, 4 antheris brevioribus ca. 6 mm. longis brevi-rostratis, filamentis 2-3 mm. longis, 3 antheris longioribus 7-9 mm. longis, filamentis 7-8 mm. longis fere erostratis; ovario linearis tomentoso stipitato turgido, stylo glabro, stigmate parvo; legumine ignoto.—PERU: CUZCO: Prov. Urubamba, Machupicchu, Feb., 1938, C. Vargas C 985 (Herb. Missouri Bot Gard., HOLOTYPE).

By inference small tree or coarse shrub, yellow-tomentose throughout (older branchlets not seen); leaves large, 10- to 12-foliate, the petiole and rachis markedly yellow-tomentose, bearing a black conic gland about 1 mm. long between the lower pair of leaflets and frequently the other pairs of leaflets as well; lower leaflets usually ovate and only  $\frac{1}{2}$  to  $\frac{1}{3}$  as long as the generally elliptic terminal leaflets, pubescent above and below, more heavily so (tomentose) and lighter in color below; inflorescence a long-pedunculate axillary raceme nearly equalling the leaf rachis, floriferous for about the terminal  $\frac{1}{4}$  of its length, the conspicuous yellow-tomentose bracts subpersistent; pedicels of mature (lower) flowers elongate, the unopened buds (apexward) congested and sessile near the tip; sepals from the outermost inward becoming larger and more petaloid, essentially glabrous except the outermost lightly pubescent; petals large, short-clawed, glabrous, conspicuously venose; fertile stamens 7, glabrous, opening by paired but confluent terminal pores, the lowermost with a comparatively thin, elongate filament and a nearly erostrate, scarcely sagittate anther, the 2 median ones similar but with thicker, margined filaments and slightly larger anthers, the 4 upper ones with short, thick filaments and smaller, briefly rostrate anthers; staminodia 3-4 mm. long, obovate, flat, thin, the "blade" equalling the "claw"; ovary cinereous-tomentose, the style glabrous, the stigma terminal and inconspicuous.

This species falls near the well-known *Cassia (Adipera) tomentosa* L. f., from which it seems worthy of separation on the basis of the larger proportions in general, and the fewer and much larger leaflets. Possibly it grades into *Adipera santanderensis* Br. & Killip of Colombia, another variant of the *C. tomentosa* complex, but bears 5-6 rather than 4-5 pairs of leaflets and is decidedly more pubescent.

**GALACTIA pedunculata** Schery, spec. nov. Herba perennis subvolubilis tenuissima semiprostrata ca. 4 dm. longa, xylopodo ignoto sed ut videtur crassato; caulis teretibus flexuosis subglabris vel minutissime appresso-strigillosis. Folia trifoliolata; stipulis anguste lanceolatis ca. 1.5 mm. longis; petiolis ca. 25 mm.

longis minute appresso-pubescentibus eglandularibus; foliolis linearibus 20–50 mm. longis et 3–6 mm. latis ad apicem obtusem angustatis ad basem rotundatis vel subcordatis supra glabris subtus leviter minuteque aureo-strigillossis et minutissime cinereo-lepidotis, venis lateralibus confluentibus prominente reticulatis, marginibus revolutis, petiolulis brevibus puberulentis, stipellis subulatis 1–1.5 mm. longis. Inflorescentia axillaris racemosa, pedunculis ca. 45 mm. longis; floribus paucis (ca. 5) terminaliter aggregatis vel subumbellatis purpureis, bracteis lanceolatis ca. 1.5 cm. longis, pedicellis 1–3 mm. longis pubescentibus; calycibus 5–6 mm. longis usque tertio inferiore pentapartitis lobis plus minusve aequimagnis ovato-lanceolatis acutis extus leviter aureo-puberulentis, vexillis orbicularibus ca. 12 mm. longis emarginatis glabris ad basem biauriculatis breve-unguiculatis, alis et carinis aequilongis subspatulatis ad basem auriculatis, staminibus glabris vexillo ad medium concrescenti, ovario plano pubescenti usque 10–15-ovulato, stylo glabro, stigmate parvo; legumine ignoto.—BRAZIL: MINAS GERAIS: on rocky terrain at about 1200 m., Ouro Preto (Saramenha?), Jan. 7, 1950, A. Macedo 2070 (Herb. Missouri Bot. Gard., HOLOTYPE).

Slender, half-prostrate, vine-like herb to several dm., apparently perennial from a thickened rootstock; stems flexuous, minutely appressed strigose or subglabrous in age; leaves trifoliolate, stipulate, prominently petiolate; leaflets linear (in a few first-formed, basal leaves linear-lanceolate), gradually contracted to a blunt and briefly mucronate apex, glabrous above, scattering golden-strigulose below and minutely cinereous-scurfy, the costa prominent, depressed above but elevated below, the lateral venation markedly reticulate; inflorescence a very contracted head-like or umbel-like axillary raceme (or condensed panicle?), floriferous for the upper few mm. with a few short-pedicellate flowers but conspicuously pedunculate below, the peduncle almost twice the length of the petioles; flowers moderate, the calyx prominently 5-lobed, the corolla about 12 mm. long; stamens equalling the corolla, fused for at least half their length, the alternate filaments somewhat unequal; anthers versatile, elliptic, less than 1 mm. long, with a dark connective; ovary linear, pubescent (especially marginally), flattened; style glabrous, arcuate, comparatively stout and terminating abruptly as an unexpanded, glabrous stigma.

This species is similar to *G. linearifolia* Hoehne, known from São Paulo, Brazil. It is one of a very few species centering around the rather unique *G. gracillima*. *G. pedunculata* differs from both *G. gracillima* and *G. linearifolia* in the conspicuously pedunculate inflorescences. The vine-like habit and unusual, slender leaflets serve to distinguish it from most other species of *Galactia*. The genus is regarded as generally having the vexillar stamen free. This is not true of *C. pedunculata* nor its near relatives.

#### VIOLACEAE

**RINOREA roureoides** Woodson, spec. nov. Arbor ca. 7 m. alta; ramulis graciliusculis glabris. Folia alternata obovato-elliptica subcaudato-acuminata basi obtusa vel late acuta apicem versus indistincte crenulata ca. 7–12 cm. longa ca.

2.5–5.0 cm. lata firmiter membranacea utrinque opaca glabra prominente venosa; petiolis ca. 5 mm. longis glabris. Inflorescentia paniculata in axillis foliorum superiorum fasciculata rariusve solitaria; pedunculis ca. 4–7 cm. longis gracilibus minute papillatis, ramulis inferioribus 3–5-floris superioribus saepissime 1-floris, bracteis minimis anguste lanceolatis. Flores albi; pedicellis ca. 2 mm. longis minute papillatis; calycis laciniis aequalibus ovato-deltoideis late obtusis 3-nerviis ca. 1 mm. longis minute ciliolatis; petalis late oblongis ca. 3 mm. longis ciliolatis; staminum filamentis ca. 1 mm. longis basi glandula reniformi minute emarginata ca. 0.5 mm. longa adnata, antheris subquadratis ca. 0.5 mm. longis, appendicibus apicalibus latissime ovatis obtusis laceratis ca. 1 mm. longis hyalinis brunneis. Pistilli ovarium globosum ca. 1 mm. diam. glabrum, ovulis 3; stylo ca. 2 mm. longo. Capsula globosa ca. 5 mm. diam. glabra.—PANAMA: COLON: Río Viejo, vicinity of Puerto Pilon, alt. 10 m., Feb. 2, 1947, P. H. Allen 4099 (Herb. Missouri Bot. Gard., HOLOTYPE).

The fascicled inflorescences characterize this species, which resembles *Rourea glabra* superficially.

#### CARICACEAE

**JACARATIA dolichaula** (Donn. Sm.) Woodson, comb. nov.

*Carica dolichaula* Donn. Sm. in Bot. Gaz. 23:247. 1897.

This species exhibits the antesepalous corolla lobes, circumscissile calyx, caudate anthers, and laminately 5-lobed stigma of *Jacaratia*, as well as the palmately compound leaves.

#### LOGANICACEAE

**SPIGELIA aceifolia** Woodson, spec. nov. Fruticulus ca. 1 dm. altus e radice lignoso subtuberoso; ramis gracilibus teretibus inferne pauci-ramosis superne simplicibus dense minute pilosulis. Folia omnino opposita sessilia vel subsessilia trigonalia apice minute mucronata basi truncata vel obscurissime cordata 5–7 mm. longa basi 2.5–3.0 mm. lata coriacea margine valde revoluta supra glabra subtus minute pilosula. Flores in axillibus foliorum superiorum solitarii sessiles; calycis laciniis lineari-lanceolatis subsetosis 5 mm. longis glabris; corolla infundibuliformi rosea extus glabra, tubo proprio cylindraceo ca. 5 mm. longo, faucibus conicis ca. 3 mm. longis, ostio ca. 2.5 mm. diam., lobis oblongo-ovatis acutis ca. 5 mm. longis; staminibus in faucibus corollae inclusis, antheris ca. 1.5 mm. longis. Fructus ignotus.—BRAZIL: MINAS GERAIS: Serra do Cipó, Municipio Jaboticatubas, campo-marem est. rodagem, frequencia pouco, March 29, 1949, M. Magalhaes 4,445 (Herb. Missouri Bot. Gard., HOLOTYPE).

Closely related to *S. stenophylla* Prog., which is glabrous and larger in all respects.

#### APOCYNACEAE

**MANDEVILLA ligustriflora** Woodson, spec. nov. Frutex volubilis; ramulis teretibus glabris maturitatem cortice rubro-brunneo striato atque lenticellato.

Folia opposita petiolata oblongo-elliptica subcaudato-acuminata basi obtusi 5–7 cm. longa 2.0–2.5 cm. lata coriacea omnino glabra supra nervo medio basi pauciglanduligero subtus pallidiora venis utrinque immersis nervo medio excepto; petiolis 0.5–1.0 cm. longis. Inflorescentia axillaris umbelliformis pauciflora; pedunculo ca. 1.5 cm. longo; bracteis linear-lanceolatis minimis; pedicellis ca. 1 cm. longis; calycis laciniis ovatis obtusiusculis ca. 1.5 mm. longis scariaceis extus minute papillatis intus in margines pauciglanduligeris; corolla infundibuliformi pro genere parvissima extus rubro-tincta atque minute puberulo-papillata intus viridi, in alabastro rotundate ovoidea haud apiculata tubo proprio ca. 2 mm. longo basi ca. 1 mm. diam., faucibus tubulo-campanulatis ca. 3 mm. longis, ostio ca. 1.5 mm. diam., lobis ovatis ca. 1 mm. longis; antheris oblongo-sagittatis basi obtuse 2-lobatis dorso glabris; pistillo carpellis ovoideis glabris, nectariis 5 compresse oblongoideis ca. 1 mm. longis ovarium paulo superantibus; stigmate umbraculiformi ca. 2 mm. longo longe apiculato.—ECUADOR: Zamora-Huaico, ca. 6 km. s. e. of Loja, alt. 2300–2400 m., July 3, 1947, R. Espinosa 1547 (Herb. Missouri Bot. Gard., HOLOTYPE).

This species approaches *M. jasminiflora* very closely indeed. The latter species, however, has narrower leaves with veins prominently elevated beneath and sunken above, and somewhat smaller corollas which are glabrous and conspicuously apiculate in the bud.

This occasion may be taken to confess that my description of *M. jasminiflora* (Woods. in Ann. Missouri Bot. Gard. 28:273. 1941) seriously errs in the description of the leaves as glandular the length of the midrib and of the calyx lobes as bearing a single opposite squamella, which together prompted me to place the species in the subgenus *Exothostemon* rather than in *Eumandevilla* where it actually belongs.

MANDEVILLA *Espinosa* Woodson, spec. nov. Frutex volubilis; ramulis crassiusculis dense ferrugineo-tomentulosis maturitate bene corticosis. Folia opposita brevissime petiolata late ovato-elliptica anguste acuminata basi cordata auriculis rotundatis convergentibus, 8–14 cm. longa 5–8 cm. lata membranacea supra sparsiuscule hirtella nervo medio basi pauciglanduligero subtus dense ferrugineo-tomentulosa; petiolo ca. 5 mm. longo. Inflorescentiae in axillas alternatas foliorum racemiformes pluriflores; pedunculis ca. 7–10 cm. longis dense ferrugineo-tomentulosis; bracteis minimis; pedicellis 1.0–1.25 cm. longis; calycis laciniis ovato-lanceolatis acuminatis 4–5 mm. longis extus ferrugineo-puberulis intus in margines pauciglanduligeris; corolla infundibuliformi viridi-gilva extus glabra; tubo proprio ca. 2 cm. longo basi ca. 1.5 mm. diam., faucibus late conicis ca. 7–8 mm. longis ostio ca. aequilato, lobis oblique obovatis ca. 3 cm. longis patulis; antheris oblongo-sagittatis basi minute emarginatis 8 mm. longis dorso glabris; pistillo carpellis oblongo-ovoideis ca. 2 mm. longis sparse minuteque pilosulis, cum nectariis 5 compresse ovoideis ca. dimidio aequantibus; stigmate umbraculiformi 3 mm. longo longiuscule atque anguste apiculato.—ECUADOR: Yacubiño (Zarumalado occidental de Chilchiles), alt. 2250 m., Sept. 3, 1947, R. Espinosa 2077

(Herb. Missouri Bot. Gard., HOLOTYPE).

Apparently most closely related to *M. glandulosa*, but differing conspicuously in the shallow, conical corolla throat.

**MANDEVILLA tricolor** Woodson, spec. nov. *Frutex volubilis; ramulis parvis minute puberulis adultis crassiusculis cortice luteo-brunneo striato bene lenticellato. Folia opposita longiuscule petiolata oblongo-elliptica breviter acuminata basi late obtusa vel rotundata 2–4 cm. longa 0.8–1.5 cm. lata membranacea supra glabra nervo medio sparse puberulo excepto ibique basi pauciglanduligero subtus in axillas nervo medio inconspicue pilosula caeterumque glabra; petiolis 4–6 mm. longis minute puberulis. Inflorescentiae in axillas alternatas foliorum corymbiformes pluriflores; pedunculis ca. 1 cm. longis minute puberulis; bracteis 3–4 mm. longis subfoliaceis; pedicellis ca. 1.5 cm. longis minute puberulis; calycis laciniis oblongis vel oblongo-ellipticis acutis plus-minus inaequalibus 5–6 mm. longis foliaceis margine revolutis extus-intus sparse pilosulis intus cum squamellis ligularibus numerosis cinctis; corolla salverformi, tubo 1.0–1.2 cm. longo basi ca. 2 mm. diam. albo extus minute puberulo-papillato, lobis oblique obovatis ca. 6 mm. longis patentibus purpureis extus intusque puberulo-papillatis; antheris in tubi medio inserto anguste oblongis basi paulo concavis 4 mm. longis dorso glabris; pistillo carpellis oboviedo-oblongoideis glabris ca. 1 mm. longis squamellis 5 brevioribus; stigmate umbraculiformi ca. 2.5 mm. longo longe apiculato.*—**ECUADOR:** Las Chinchas, 64 km. west of Loja, alt. 1700 m., March 1, 1947, *R. Espinosa* 1332 (Herb. Missouri Bot. Gard., HOLOTYPE).

Apparently mostly closely related to *M. scutifolia*, and differing from it chiefly in the smaller leaves and very conspicuous, foliaceous calyx.

**HOLALAFIA Schumannii** (Stapf) Woodson, comb. nov.

*Alafia Schumannii* Stapf, in *Fl. Trop. Afr.* 4<sup>1</sup>:197. 1904; Hutchinson & Dalziel, *Fl. W. Trop. Afr.* 2<sup>1</sup>:45. 1931.

I have chanced upon the need for this new combination while identifying a few of Dr. J. T. Baldwin's plants of West Africa. An isotype of *Alafia Schumannii* (Zenker 1662 in Herb. Missouri Bot. Gard.) shows not only the syncarpous ovary but the distinctive inflorescence structure of *Holalafia*. Incidentally, one of Dr. Baldwin's plants is a fruiting *Holalafia multiflora* Stapf: the follicles are linear, nearly 8 dm. long and about 1.5 cm. thick, and glabrous; the seeds have a body about 2.5 cm. long, the coma (with yellowish hairs about 6 cm. long) borne along a rostrum 1.5 cm. long, much as in *Funtumia*, but the hairs spreading and not retrorse (Baldwin 13969 in Herb. Missouri Bot. Gard. and U. S. Dept. Agr.). I have never seen *Holalafia* and *Alafia* distinguished on the basis of seeds, but I suspect that in the former genus the coma may always be rostrate and in the latter sessile.

ASCLEPIADACEAE

**MATELEA Meyeri** Woodson, spec. nov. *Frutex volubilis; ramulis gracilibus complicate pubescentibus (sparsiuscule eglandulo-pilosis cum trichomis brevioribus*

plus minusve densioribus tum simplice eglandulosis tum brunneis bulbosis glandulosis interspersis). Folia opposita petiolata, lamina ovata cordata acuminata 8–9 cm. longa 4.5–5.0 cm. lata membranacea utrinque puberula (praecipue eglandulosa); petiolo ca. 3 cm. longo ut in ramulo vestito. Inflorescentia corymbiformis pluriflora; pedunculo ca. 1–2 cm. longo cum pedicellis ut in ramulo vestito; pedicellis gracilibus ca. 1.5 cm. longis; bracteis linear-lanceolatis ca. 0.2 cm. longis. Flores ut creduntur gilvi extus plus minusve complicate pubescentes; calycis laciniis ovato-lanceolatis acuminatis ca. 0.3 cm. longis; corollae rotato-campanulatae tubo ca. 0.2 cm. longo basi ca. 0.1 cm. diam., faucibus ca. 0.2 cm. diam., lobis linear-lanceolatis acuminatis erectis vel ascendentibus ca. 1 cm. longis; corona ample infundibuliformi carnosa corollae tubae valde adnata ostio ca. 3 mm. diam., sat integra sed obscure 5-loba quoque ligulam brevem gerente intus omnino carunculata; gynostegio brevi-stipitato ca. 1 mm. alto late 5-gono ca. 2 mm. diam., stigmate depresso, polliniis horizontalibus falciformi-subpyriformibus cum caudiculo breve ca. 0.5 mm. longis. Folliculi immaturi conspicue muricati dense complicate pubescentes.—MEXICO: TAMAULIPAS: open places along Río San Marcos, 5 mi. west of Ciudad Victoria, alt. 500 m., June 13, 1948, F. G. Meyer & D. J. Rogers 2500 (Herb. Missouri Bot. Gard., HOLOTYPE).

A most curious species, obviously referable to my subgenus *Helostemma* (cf. Ann. Missouri Bot. Gard. 28:221. 1941), but superficially very similar to *Matelea belizensis* (subgen. *Tiarastemma*).

**MATELEA Rogersii** Woodson, spec. nov. Frutex volubilis; ramulis gracilibus complicate pubescentibus (sparsiuscule eglandulo-pilosis cum trichomis brevioribus plus minusve densioribus tum simplice eglandulosis tum brunneis bulbosis glandulosis interspersis). Folia opposita longe petiolata, lamina late ovata cordata abrupte acuminata 15–20 cm. longa 13–15 cm. lata membranacea utrinque complicate puberula; petiolo ca. 6–7 cm. longo ut in ramulo vestito. Inflorescentia sub-umbelliformis pluriflora; pedunculo ca. 7–8 cm. longo cum pedicellis ut in ramulo vestito; pedicellis 2.5 cm. longis crassiusculis; bracteis anguste lanceolatis ca. 0.4 cm. longis. Flores virescentes; calycis laciniis elliptico-suborbicularibus obtusis subfoliaceis 0.7–0.8 cm. longis extus complicate pubescentibus; corolla late rotata eliganter reticulo-venosa extus intusque indistincte papillata ca. 2.5 cm. diam., lobis late ovato-deltoideis rotundatis minuteve mucronulatis ca. 0.8–1.0 cm. longis 1.3 cm. latis patulis; corona disciformi corollae faucibus adnata ca. 3 mm. diam., integra vel indistincte irregulariterque crenulata; gynostegio sessile ca. 1 mm. alto latissime 5-gono ca. 3 mm. diam., stigmate sat plano, polliniis horizontalibus subtriangulari-pyriformibus cum caudiculo late alato subaequilongo ca. 1 mm. longis. Fructus desunt.—MEXICO: NUEVO LEON: in arroyo, near Dulces Nombres, alt. 1400 m., Aug. 23, 1948, F. G. Meyer & D. J. Rogers 3072 (Herb. Missouri Bot. Gard., HOLOTYPE).

A member of subgen. *Eumatelea* sect. *Reticulatae*, closely allied to *M. reticulata* and *M. Gentlei*, but differing from both in the much larger flowers, the large, suborbicular calyx lobes, and the nearly entire corona disc.

**MATELEA ionantha** Woodson, spec. nov. Frutices volubiles; ramulis gracillimis juventate minute pilosulis maturitate cortice sulcato dilute luteo tectis. Folia opposita longe petiolata, lamina ovata profunde cordata sensim acuminata 5–7 cm. longa 2.5–4 cm. lata membranacea utroque pagina sparsiuscule pilosula margine densius ciliolata, petiolo 2–2.5 cm. longo. Inflorescentia lateralis umbelliformis pauciflora, pedunculo 1–1.5 cm. longo, pedicellis ca. 5 mm. longis minute pilosulis cum glandulis minutissimis fuscis interspersis, bracteis minimis. Flores parvi purpurei, calycis laciniis ovato-lanceolatis acuminatis 4–5 mm. longis complicate pubescentibus, corolla rotato-subcampanulata extus intusque dense complicate pubescente ca. 1.5 cm. diam., lobis ovatis obtusis 5–6 mm. longis, patulis; corona annulata carnosa corollae faucibus valde adnata, segmentis 5 paene coalitis rhomboideis ca. 0.5 mm. altis 1 mm. latis planis dente truncato ca. 1 mm. alto excepto per saepto angusto ad gynostegio junctis. Gynostegium fere sessile ca. 2 mm. diam., stigmate depresso ca. 1.5 mm. diam. cum umbone lato, antherarum appendicibus apicalibus brevissimis, polliniis brevissime arcuatis fere quadratis ca. 0.3 mm. longis et latis margine superiore pellucido, caudiculis corpusculoque minimis.—  
MEXICO: VERA CRUZ: over shrubs at edge of oak forest near El Puerto, above Acultzingo, alt. 7600–7800 ft., Sept. 13, 1944, A. J. Sharp 44,830 (Herb. Missouri Bot. Gard., HOLOTYPE).

Referable to subgen. *Helostemma* (cf. Ann. Missouri Bot. Gard. 28:233. 1941), this species apparently is most closely allied to *M. cyclophylla* (Standl.) Woods., but differs in the vastly different foliage and smaller flowers with pollinia so short as to be scarcely arcuate.

**MARSDENIA Rotheana** Woodson, spec. nov. Sect. ELLIPTICARUM Rothe. Frutex volubilis; ramulis glaberrimis maturitate cortice singulare suberoso-fimbriatis. Folia modice petiolata, lamina ovato- vel oblongo-elliptica abrupte breviterque acuminata basi truncata vel plus-minus cordata 6–8 cm. longa 2.5–4.0 cm. lata firmiter membranacea glaberrima subtus pallidiora; petiolis 0.7–1.0 cm. longis sparse appresse pilosulis. Inflorescentia lateralis umbelliformis pauci- (plerumque 3-) flora; pedunculo ca. 0.5 cm. longo; pedicellis filiformibus 1.5–2.0 cm. longis glaberrimis; calycis laciniis ovatis obtusis vel rotundatis ca. 2 mm. longis minute ciliolatis intus cum squamellis minutis alternatis 1–2; corolla campanulato-rotata extus intusque glaberrima lutea, tubo ca. 2.5 mm. alto faucibus ca. 6 mm. diam., lobis late ovato-trigonalibus late acutis ca. 6 mm. longis patulis. Gynostegium dimidio exsertum ca. 4 mm. longum; stigmate late conico; coronae squamis duplicitibus dorso subquadratis ca. 2 mm. longis et latis processu aciculari paulo breviori. Fructus ignoti.—PANAMA: COCLÉ: Cerro Pajita, region north of El Valle de Antón, alt. 3500 ft., May 12, 1947, P. H. Allen 4495 (Herb. Missouri Bot. Gard., HOLOTYPE).

This is the first species of Rothe's section ELLIPTICAE (cf. Engl. Jahrb. 52:424. 1915) to be described from the continent. Its closest relative would appear to be *M. Dussii* Schltr. of Martinique, which has smaller, reddish flowers with much shorter pedicels.